

Aviation Element

Introduction

Airports are an important part of the transportation system as well as the economy. Airport facilities can be divided into two major categories:

- Air carrier airports
- General aviation (GA) airports

Air Carrier Airports—These include the facilities that serve regularly scheduled passenger service. They are large facilities with the capacity to handle significant volumes of freight/cargo and passengers on a daily basis. Three airports —Charlotte-Douglas International, Raleigh-Durham International, and Piedmont Triad International — account for the majority of revenue and traffic generated by airports within this classification.

General Aviation Airports—These include the smaller facilities that exist in the majority of counties throughout the state. These facilities typically have paved runways 2,000 feet to 5,500 feet in length and are capable of accommodating small (single engine) and medium sized (multi-engine) aircraft. These airports often provide opportunities for businesses with suitable aircraft to avoid the use of larger facilities and minimize air travel associated lag time. They also have proven useful in attracting business to communities throughout the state.

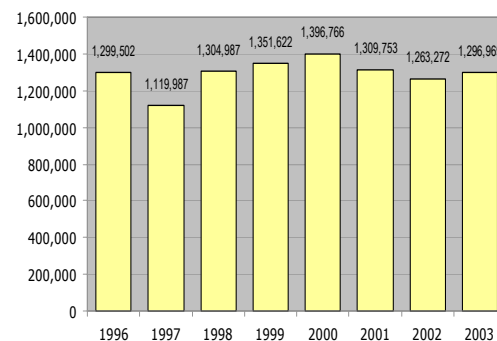


Airports in the North Carolina Piedmont

Source: NCDOT, Division of Aviation

Existing Conditions

The Piedmont Triad International Airport (PTIA) is owned and operated by the Piedmont Triad Airport Authority (PTAA) and is located west of the City of Greensboro. PTIA is classified as an air carrier airport and offers scheduled air passenger services through commercial airlines and charters, as well as services for general aviation — accommodating small (single engine) and medium sized (multi-engine) aircraft. Between 1996 and 2003, passenger enplanements—the number of passengers served at PTIA—were steady, with the highest number experienced in 2000. Following the worldwide decrease in the number of people traveling by air, a direct result of world events in 2001, passenger enplanements decreased steadily for two years. 2003 was a passenger traffic growth year for PTIA, and 2004 is showing signs of a continuation of this trend with more passengers and more flights.



Airport Passenger Enplanements from 1996 to 2003

Passenger traffic is an important component of the operations of PTIA; however, air cargo operations also are an integral part of airport business and its operating revenues. PTIA is currently a cargo spoke (hub and spoke system) airport for a number of air cargo carriers, but has been selected by FedEx for the development of a hub facility. When FedEx starts hub operations at the airport, cargo-related aircraft traffic will increase substantially and FedEx truck and other vehicle traffic will also increase. Corresponding airfield and roadway improvements are planned to accommodate this and other operational growth and are discussed in the future conditions section of this element.

Airside Facilities

Airside facilities are those elements of airport infrastructure that serve aircraft and direct aircraft-related needs/requirements. These include terminal facilities, hangars, maintenance facilities, storage facilities, runways, taxiways, aprons, lighting, and approach aids. The current PTIA airport configuration provides for one main runway (10,000 feet long) and one secondary runway (6,380 feet long).

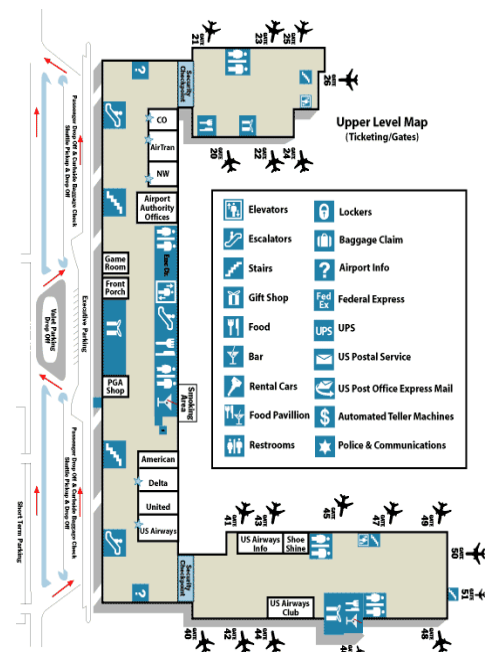
Landside Facilities

The airport is a major economic generator in the Greensboro urban area, both in the impact directly created by the airport—airport jobs and tax revenues—and in the countless businesses that locate in the Greensboro area as a result of the access to the airport and the services it provides. To accommodate commercial air service passengers and the services that are required, the airport has a main terminal building that provides the following:

- 256,000 square feet (sf) on two public levels
- 65,000 sf on the service level below ground level
- 18 aircraft parking positions adjacent to the two concourses
- Separate baggage claim and ticket counter areas for each concourse (North Concourse 7 and South Concourse 11)

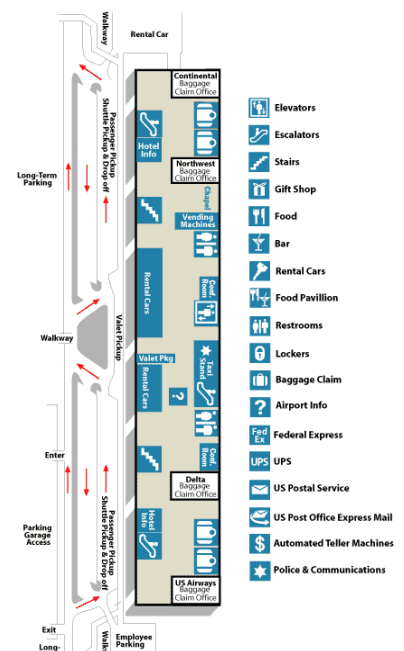
In addition to passenger service and waiting areas, the airport currently has an approximately 1,900 space multi-level parking garage located adjacent to the passenger terminal as well as numerous surface lots and satellite lots for long-term parking. The airport provides ground transportation on a regular schedule—10- to 20-minute intervals all day—from all remote airport parking to the passenger terminals.

In addition to self park options, valet service is offered through a private parking service.



Upper Level Passenger Terminal

Source: Piedmont Triad International Airport



Lower Level Passenger Terminal

Source: Piedmont Triad International Airport

Access and Transportation

Piedmont Triad International Airport (PTIA) is located on the north side of I-40, to the west of downtown Greensboro. The airport's primary major transportation corridor access is from Bryan Boulevard, which provides direct access to the passenger terminal and parking areas.

Airport shuttles are provided between satellite parking lots and the passenger terminal on a regular schedule. In addition, a number of Greensboro area hotels provide shuttle services to the airport for guests. Rental vehicles are provided by a number of on-airport agencies.

The airport is also connected to adjacent communities and local public transportation hubs in Greensboro, High Point, and Winston-Salem via the Piedmont Authority for Regional Transportation (PART). PART provides access to PTIA via the PART Express bus route, which picks up and departs from the lower level baggage claim of the airport. PART has a regional hub located minutes away from the airport on NC 68 just south of I-40.

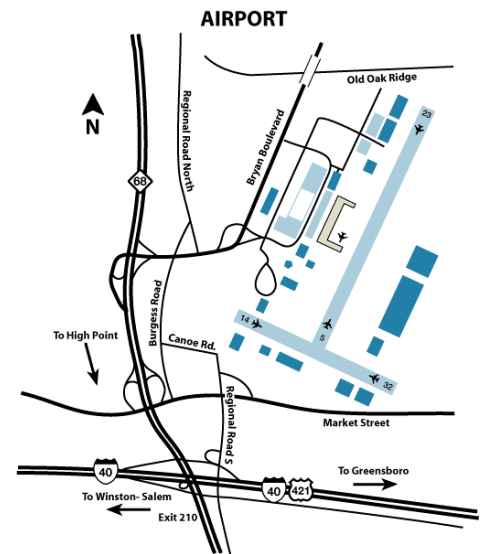
General Aviation

In addition to serving commercial air traffic, the airport also provides services and facilities to accommodate general aviation operations. The size of the airport and the conflicts between commercial operators necessitates that general aviation is accommodated separately. The airport currently provides a separate area for these general aviation operations that includes a hangar complex and general aviation services through a number of providers.

Future Conditions

Planning for the future and constructing needed improvements is important for each airport as an individual facility, but also for the national and international system of airports as a whole. When an airport system or an individual facility begins to approach capacity, critical issues arise ranging from continued business viability to safety.

The PTIA already has undertaken steps to plan for the expansion of airport facilities in the near term and long-term. The airport has a master plan and submitted projects identified in the resulting airport layout plan (ALP) to the FAA for consideration. The primary focus of airport expansions under these plans is to improve airfield capacity under visual meteorological conditions (VMC) and instrument meteorological conditions (IMC) through



Airport Access

Source: Piedmont Triad International Airport

the provision of a parallel Transport Category runway 9,000 feet in length and 150 feet in width. This runway is proposed to parallel existing runway 5/23 and will be designated runway 5L/23R. In addition to these plans, other airport expansions proposed include a cargo apron expansion to accommodate an overnight, express air cargo sorting, and distribution facility; numerous off-airport roadway improvements; property acquisition and relocation; and NAVAID improvements.

The planning for these expansions is currently moving forward with the completion of the Environmental Impact Statement (EIS) phase and receipt of a Federal Aviation Administration (FAA) Record of Decision (ROD). Many of the projects will impact major roadway facilities, which are not under the jurisdiction of the FAA. As required, coordination is underway with the Federal Highway Administration (FHWA).

Summary Recommendations

- Implementation of the landside and airside improvements described in the airport master plan and the Environmental Impact Statement.
- Continue to improve access and wayfinding signs to the airport in response to the changing transportation system (especially the addition of the urban loop and future interstate corridors).
- Maintain and enhance highway access to the airport by implementing the proposed airport connector — NC 68 connector — improvements to West Market Street and NC 68.
- Develop a series of interconnected collector streets to ensure mobility within the airport vicinity.
- Include the Airport Authority in development of a future Intermodal Management System with the intent of enhancing the safe movement of goods and people to and from the airport area.

The following provides a listing of proposed projects associated included in the current EIS for PTIA:

Airside

- Construction of a new runway 5L/23R— 9,000 feet long and 150 feet wide
- Construction of a high speed taxiway from runway 5R/23L in the vicinity of the proposed FedEx site
- Relocation of existing air cargo
- Construction of cross field connecting taxiways and necessary bridge structures between the existing airfield and the proposed new runway
- Extension of cross field taxiway D to connect to the new runway
- Construction of Phase 1 and 2 cargo aprons (FedEx site)

Landside

- Relocation of existing rental car facilities
- Closure and relocation of sections of Old Oak Ridge Road
- Construction of a new interchange on Old Oak Ridge Road and Bryan Boulevard
- Construction of a tunnel for Bryan Boulevard under the new taxiway
- Closure and relocation of sections of Regional Road
- Construction of two new interchanges on Bryan Boulevard to serve the airport— South Triad Interchange and North Triad Interchange

Additional information for the aforementioned airfield expansions can be referenced in the *Environmental Impact Statement for the Piedmont Triad International Airport*, approved by the FAA.